## PATENT ABSTRACTS OF JAPAN

(11)Publication number: 09-223854(43)Date of publication of application: 26.08.1997

(51)Int.CI. H05K 1/02

(21)Application number: **08-027528** (71)Applicant: **MATSUSHITA ELECTRIC IND CO LTD** 

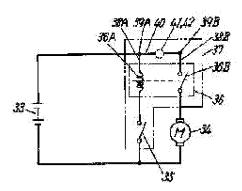
(22)Date of filing: 15.02.1996 (72)Inventor: SAITO KATSUYA NAKADE YOSHIYUKI

## (54) **PRINTED WIRING BOARD**

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a safety function virtually without increases in cost by forming an area not covered with solder resist in proximity to the center of a wiring pattern between lands made of copper foil, applying solder to the surface of the copper foil, and fusing part of it in a short time.

SOLUTION: For a printed wiring board for automobile electrical equipment, a wiring pattern 40 that provides connection between lands 39A, 39B for connecting electronic parts is so designed that temperature rise in the non-solder resist area 41 in the center of the wiring pattern 40 will be 20°C or below at the steady current value in normal condition. The width of the wiring pattern 40 is so set that the temperature rise will be 200°C or so, at which solder is melted, at the current value at which the motor is locked, and solder is applied to the non-solder resist area 41 in the center as well. This fuses the wiring pattern in a short time, and enables adjustment of time it takes for the wiring pattern to be fused according to the magnitude of overcurrent. Therefore, it is possible to provide the printed wiring board with a safety function virtually without increases in cost.



## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office